

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Amendment of Part 2 of the Commission's Rules)	ET Docket No. 00-258
to Allocate Spectrum Below 3 GHz for Mobile)	
and Fixed Services to Support the Introduction of)	
New Advanced Wireless Services, Including Third)	
Third Generation Wireless Systems)	
)	
Amendment of Section 2.106 of the Commission's)	ET Docket No. 95-18
Rules to Allocate Spectrum at 2 GHz for Use by)	
the Mobile-Satellite Service)	
)	
The Establishment of Policies and Service Rules)	IB Docket No. 99-81
for the Mobile-Satellite Service in the 2 GHz Band)	

To: The Commission

COMMENTS OF NEW ICO GLOBAL COMMUNICATIONS

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SUMMARY

The reallocation of 2 GHz Mobile Satellite Service (“MSS”) spectrum for terrestrial Third Generation wireless (“3G”) or other uses would harm the public interest and represent an arbitrary, unprecedented departure from a reasonable allocation policy that has been under development for almost a decade.

The Commission’s 2 GHz allocation policy reflects the profound importance of MSS technology as a means of providing both basic and advanced telecommunications and information services to all areas, including remote and underserved areas, at all times. Reallocation of MSS spectrum to 3G uses would severely undermine this policy by depriving 2 GHz MSS operators of adequate spectrum, eliminating the flexibility and efficiency of the existing allocation plan, and drastically accelerating the economic burden of relocation of BAS incumbents. Reallocation also would transfer 2 GHz spectrum to a technology that is unlikely to make complete use of that spectrum or to deliver services promptly to the public.

In addition to its negative impact on the public interest, reallocation of 2 GHz spectrum to 3G or other uses and relocation of existing users likely could not be sustained as a rational exercise of the Commission’s rulemaking power. The reallocation would depart radically from the 2 GHz MSS allocation policy, without any change in circumstances that can justify such action. Moreover, reallocation would frustrate the FCC’s objectives of fostering efficient spectrum use and facilitating the rapid deployment and growth of new services.

Rather than take unjustified action that will prevent or substantially delay the deployment of new services to underserved areas, the Commission should maintain its 2 GHz MSS allocation policy. If the Commission deems it necessary to reallocate some

2 GHz MSS spectrum for other uses, it should reallocate not more than 5x2 MHz of spectrum, to ensure that this global MSS allocation is preserved. This spectrum should be reallocated for use only by incumbent federal government users displaced from the 1.7 GHz band. This reallocation will support critical federal government operations, facilitate the entry of new advanced wireless services in the 1.7 GHz band, and minimize the relocation costs of incumbents in the 2 GHz band. Finally, to encourage more efficient and intensive use of the 2 GHz MSS spectrum, the Commission should permit flexibility in the sharing of satellite infrastructure and transfer of licenses to parties that deploy MSS systems.

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To: The Commission

COMMENTS OF NEW ICO GLOBAL COMMUNICATIONS

New ICO Global Communications (Holdings) Ltd. ("New ICO")¹ submits these comments on the Notice of Proposed Rulemaking in the above-captioned proceeding.²

Having led the initiative to secure domestic and international allocations for mobile satellite service ("MSS") in the 2 GHz band,³ the Commission must not waver now from its steadfast commitment to ensuring the prompt deployment of next-generation MSS. 2 GHz MSS

¹ New ICO, a Delaware corporation, is the parent of ICO Services Limited, a UK company that is authorized to provide 2 GHz mobile satellite service in the United States.

² See *Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems*, FCC No. 01-224, Memorandum Opinion and Order and Further Notice of Proposed Rulemaking (Aug. 20, 2001) ("*Advanced Wireless FNPRM*").

³ As used herein, the terms "2 GHz band" and "2 GHz MSS spectrum" will refer to spectrum at 1990-2025 MHz and 2165-2200 MHz.

holds the distinct promise of delivering cost-effective basic and advanced services to all Americans anywhere, anytime. Key to the realization of this promise is the allocation and assignment of sufficient spectrum to support the development and growth of 2 GHz MSS systems.

The proposed reallocation of 2 GHz MSS spectrum threatens to undo the tremendous effort and resources that the Commission and many others have committed over the last 10 years to achieving the promise of 2 GHz MSS. Although the Commission only recently granted authorizations to launch 2 GHz MSS systems, New ICO already has invested billions of dollars, has met its first three milestone requirements years ahead of schedule, and is poised to launch service before any commercial, terrestrial system seeking to use the spectrum could hope to commence operations. A reallocation of spectrum would deprive New ICO and other 2 GHz MSS licensees⁴ of the opportunity afforded other promising new wireless services to develop their systems, grow their businesses, and demonstrate their commercial viability.

New ICO urges the Commission to take this opportunity to reaffirm its commitment to the existing 2 GHz MSS allocation policy and adopt additional measures to permit flexibility in the sharing of satellite infrastructure and transfer of licenses to parties that deploy 2 GHz MSS systems. To honor its international commitments and facilitate the deployment of truly global MSS systems, the Commission must not undertake any reallocation of 2 GHz MSS spectrum that would conflict with international allocations for 2 GHz MSS worldwide.

⁴ With respect to 2 GHz MSS, the terms “licensees” and “licenses,” as used herein, will refer, respectively, to all authorized 2 GHz MSS system proponents and their FCC authorizations to provide 2 GHz MSS in the United States.

I. MSS USE OF THE 2 GHz BAND BEST SERVES THE PUBLIC INTEREST BY OFFERING CRITICAL COMMUNICATIONS SERVICES TO UNDERSERVED AREAS AND DURING EMERGENCIES

Throughout the last decade, the FCC actively has pursued international and domestic spectrum allocations for MSS in the 2 GHz band. In doing so, the FCC has sought to ensure that critical access to communications services is available to all areas of the world and at all times. 2 GHz MSS systems are uniquely suited to extend affordable, high-quality communications services to communities throughout the United States and the world that are not served by terrestrial systems, wireline or wireless. In times of emergency and disaster, 2 GHz MSS systems may offer the only effective means of communications. Continued support of the existing 2 GHz MSS allocation is crucial to the Commission's objective of facilitating the prompt deployment of innovative services to all Americans.

A. MSS Systems Are Uniquely Suited To Serve Underserved Communities Of The United States And The World

The FCC has long acknowledged the potential value of MSS in sparsely populated rural and remote areas that may not be readily or economically served by terrestrial wireless systems.⁵ Unlike terrestrial wireless and wireline systems, MSS systems are uniquely suited to serve rural and underserved areas because of their inherent capability to provide coverage to the entire U.S. at all times.

In fact, the FCC has found that satellite systems offer distinct economic and technical advantages over terrestrial wireless and wireline systems. Specifically, the FCC has noted that "satellites may offer cost advantages over wireline access in rural and remote areas, where sparsely populated areas cannot provide the economies of scale to justify the deployment costs of

wireline networks.”⁶ Satellites also can provide service to “geographically isolated areas, such as mountainous regions and deep valleys, where rugged and impassable terrain may make service via terrestrial wireless or wireline telephony economically impractical.”⁷ Moreover, because of their nationwide coverage capability, satellite systems offer a “cost-effective” means of delivering service to all areas of the United States by permitting operators to spread the costs of service across a large, national subscriber base.⁸ Consequently, the FCC has found satellites to be “an excellent technology for delivering basic and advanced telecommunication services to unserved, rural, insular or economically isolated areas, including Native American communities, Alaska, Hawaii, and Puerto Rico, and U.S. territories and possessions such as communities within the U.S. Virgin Islands, Guam and American Samoa.”⁹ As illustrated in Figure 1 below, a single ICO satellite covers an area far larger than the continental United States.

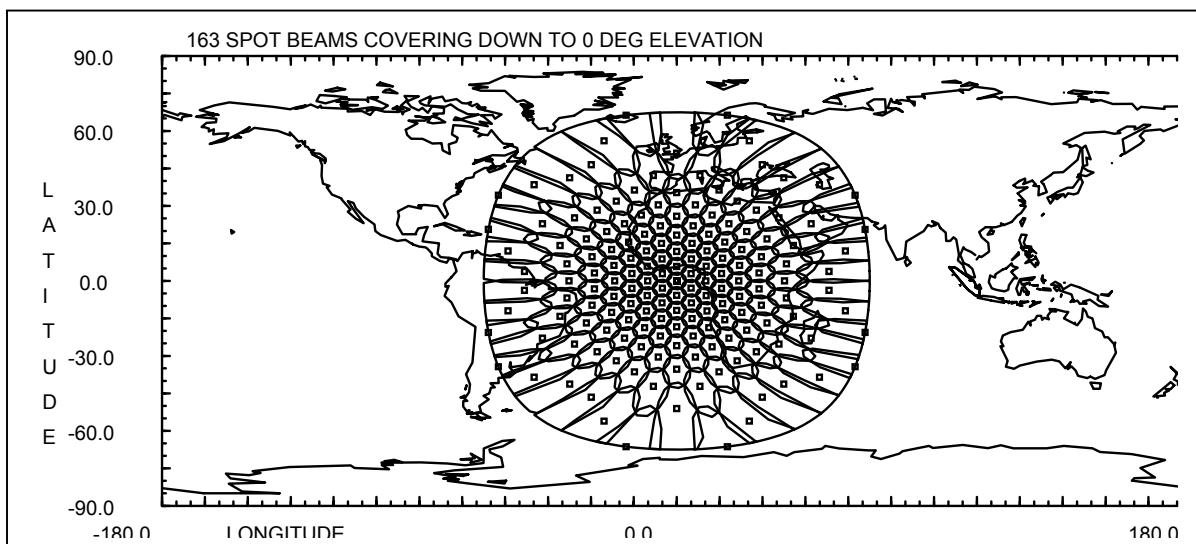
⁵ See, e.g., *Amendment of the Commission’s Rules to Establish New Personal Communications Services*, Memorandum Opinion and Order, 9 FCC Rcd 4957, 4995 ¶ 94 (1994).

⁶ *Extending Wireless Telecommunications Services to Tribal Lands*, Report and Order and Further Notice of Proposed Rule Making, 15 FCC Rcd 11794, 11799 ¶ 13 (2000) (“*Tribal Lands Report*”).

⁷ *Id.*

⁸ *Id.*

⁹ *Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band*, 15 FCC Rcd 16127, 16145 ¶ 32 (2000) (“*2 GHz MSS Rules Order*”).



MSS systems offer not only nationwide coverage, but also seamless global coverage, permitting anyone anywhere in the world to communicate with others at any time. MSS will reach areas of the world that cannot be served by terrestrial wireless or wireline systems due to terrain limitations, costly network build-outs, lack of coverage, or incompatible technical standards. MSS not only is important to the underserved communities of the United States, but also can contribute to the physical, social, and economic well-being of developing countries. Former South African President Nelson Mandela, who has urged the United States to continue its support of MSS, recently underscored this point, noting that “[f]or developing nations, [satellite service] may be the only answer to the challenge of connecting communities that are isolated by terrain or distance from urban telecommunications infrastructure.”¹⁰

Millions of Americans today still do not receive even the most basic telephone services, wireline or wireless.¹¹ The FCC has found the lack of basic telephone services to be particularly

¹⁰ See Letter from N. Mandela to C. Powell, Secretary, Department of State at 2 (June 9, 2001) (attached to Ex parte letter from S. Hutchings, Senior Regulatory Counsel, New ICO, to M.R. Salas, Secretary, FCC, *Amendment of Section 2.106 of the Commission’s Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service*, ET Docket No. 95-18 (June 26, 2001)).

¹¹ See FCC Industry Analysis Division, *Trends in Telephone Service*, Table 17.1 (Aug. 2001).

severe for Native American tribal communities. Specifically, less than 60 percent of those residing on 23 of the 48 largest tribal reservations receive any telephone service.¹² The telephone penetration rates for other tribal reservations are lower still.¹³ The telephone penetration rate for tribal communities is significantly lower than that for low-income communities in general.¹⁴

Recognizing that basic telephone service is not just a luxury, but a “necessity,”¹⁵ the FCC aptly has summarized the adverse consequences arising from the lack of access to any telephone service:

The lack of basic telecommunications services puts affected tribal communities at a tremendous social and economic disadvantage. Individuals with serious health problems are subject to significant medical risks if they lack ready access to telephone service. Individuals seeking jobs cannot provide prospective employers telephone numbers through which they can be reached, nor can they make follow-up calls quickly and easily. Parents at home without a phone cannot be contacted by schools in emergencies. In addition, communities without telephone service often lack access to the Internet, which is fast becoming one of the most important tools not only for communication, but also to obtain invaluable educational, medical, political, and financial information.¹⁶

In addition to those Americans that do not receive any basic telephone service, even more have no access to any advanced communications services. The FCC has noted the alarming lack of broadband deployment, wireline or wireless, to rural and other underserved areas in the United States.¹⁷ In particular, the FCC has found that “the majority of Americans who live in rural

¹² See *Tribal Lands Report* at 11798 ¶ 8.

¹³ *Id.*

¹⁴ *Id.* (reporting that, in 1998, U.S. households with incomes below \$5,000 had a penetration rate of 78.7 percent, while the 48 largest tribal reservations had a 46.6 percent penetration rate).

¹⁵ *Id.* at 11798 ¶ 9.

¹⁶ *Id.*

¹⁷ See, e.g., *Inquiry Concerning the Deployment of Advanced Telecommunications Capability*, Second Report, 15 FCC Rcd 20913, 20996-7 ¶¶ 220-23, 21001-2 ¶¶ 237-41 (2000) (“*Advanced Services Second Report*”).

areas, do not have readily available, lowest-cost access to advanced or even high-speed services today.”¹⁸ FCC data shows that rural areas are significantly less likely to receive high-speed services than urban or suburban areas,¹⁹ and that the overwhelming majority of the most sparsely populated areas have no subscribers to any high-speed services.²⁰ Similarly, 33 percent of zip codes associated with Native American tribal lands have no high-speed subscribers at all.²¹

Although terrestrial wireless systems have the potential to extend basic and high-speed telecommunications services to rural and remote areas not otherwise served by wireline systems, they have been unable thus far to offer cost-effective service to the vast majority of Americans. As of December 2000, approximately 61 percent of Americans did not receive any mobile telephone services.²²

B. MSS Is Crucial To Rescue And Relief Efforts During Local And National Emergencies

Even in those areas covered by terrestrial wireline and wireless systems, MSS continues to offer a vital means of communications, particularly in times of emergency and disaster.

¹⁸ *Id.* at 20997 ¶ 223. The FCC generally defines “advanced” services as having the capability to support a bandwidth of over 200 kbps in both directions. The FCC also defines “high-speed” services as having the capability to support a bandwidth of over 200 kbps in at least one direction. See *Inquiry Concerning the Deployment of Advanced Telecommunications Capability*, Report, 14 FCC Rcd 2398, 2406 ¶ 20 (1999); *Advanced Services Second Report* at 20917 ¶ 8, 20919-21 ¶¶ 10-12.

¹⁹ See *Advanced Services Second Report* at 20996 ¶ 220.

²⁰ *Inquiry Concerning the Deployment of Advanced Telecommunications Capability*, Third Notice of Inquiry, FCC No. 01-223, ¶ 14 (Aug. 10, 2001) (“*Advanced Services NOF*”) (reporting that, as of December 2000, 37 percent of the most sparsely populated zip codes have at least one high-speed service subscriber, thus suggesting that the remaining 63 percent do not have a single high-speed service subscriber).

²¹ *Id.* ¶ 15 (reporting that, as of December 2000, 67 percent of zip codes for Native American tribal lands have at least one high-speed service subscriber, thus suggesting that the remaining 33 percent do not have a single high-speed service subscriber).

²² According to a semi-annual mobile telephone industry survey by Cellular Telecommunications and Internet Association, the nationwide penetration rate for mobile telephony was 39 percent, as of December 2000. The nationwide penetration rate was calculated by dividing total mobile telephone subscribers by the total U.S. population. See *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993*, Sixth Report, FCC No. 01-192, at 5-6 (July 17, 2001) (“*CMRS Annual Report*”).

Ground-based terrestrial wireless communications systems are susceptible to numerous forces—such as loss of power and/or physical damage resulting from environmental or man-made cataclysms—that do not endanger MSS systems. Time and again, MSS has proven to be the only effective means of communications at times and in locations where terrestrial wireline and wireless systems have failed. Most recently, MSS telephones were deployed by rescue workers at the sites of both the World Trade Center and Pentagon attacks when transmission towers that powered cellular phones were destroyed or remaining capacity was over-taxed.²³ MSS telephones also were instrumental in other rescue and relief efforts involving earthquakes,²⁴ hurricanes,²⁵ tornadoes,²⁶ cyclones,²⁷ floods,²⁸ forest fires,²⁹ and refugee migrations.³⁰ In

²³ See *Rescue Workers Get New Phones*, St. Petersburg Times, Sept. 18, 2001, at 9A (reporting that rescuers and city crews were having difficulty with the recovery effort because cell phones often did not work in lower Manhattan, prompting President Bush to provide 200 special satellite phones for rescue workers at the World Trade Center); Sarah Bisker, *Ohio University Satellite Relieves Telephone Line Congestion*, University Wire, Sept. 12, 2001 (reporting that the New York State Emergency Management Agency requested use of a NASA satellite to provide alternative communications routes); Jane Larson, *Iridium's Phones Suddenly In Demand; With Land Service Out, System Aids In Crisis*, The Arizona Republic, Sept. 13, 2001; Dick Kelsey, *Satellite Phone Interest Renewed After Attack Rescue Use*, Newsbytes, Sept. 25, 2001; *Satellite Phones Show Value As Supplemental Service*, Satellite Today, Sept. 14, 2001.

²⁴ See, e.g., Veronique Mistiaen, *Calls for Help: How A Communications Charity Is Offering Life Lines In Disaster Relief*, The Guardian (London), Aug. 30, 2000, at 7 (noting that the French charity organization, Telecoms Sans Frontieres, was able to help save 14 lives in the 1999 earthquake in Istanbul, Turkey, by using satellite phones to locate much needed relief equipment and that it had previously used satellite phones to aid Kosovar refugees in Albania with calling their families); *COMSAT Providing Earthquake Assistance In Turkey*, PR Newswire, August 25, 1999; Central News Agency, Taipei, *Nantou County Worst Hit By Earthquake*, The British Broadcasting Corporation, Sept. 24, 1999 (noting that satellite phones were supplied to rescue workers during the September 21, 1999, earthquake in Nantou County, Taiwan); American Embassy, Tokyo, *Japan Emergency Preparedness Products/Service Market*, Industry Sector Analysis, July 15, 1997 (explaining Japan's substantial investment in satellite phone technology for disaster prevention); George Nirmala, *Death Toll in Indian Earthquake at 13,000*, Chattanooga Times/Chattanooga Free Press, Jan. 28, 2001, at A1; Duncan Campbell, *El Salvador Earthquake: Contested Property Scheme Blamed for Many Deaths*, The Guardian (London), Jan. 6, 2001.

²⁵ See, e.g., Amy E. Hancock, *Satellite Phones, Capacity and Little LEOs: The Disaster Relief Equation*, Satellite Communications, July 2000 (quoting an American Red Cross official as saying with respect to Hurricane Marilyn, "We went down there and practically every phone line was down. Our only reliable means of communication for the first seven to 10 days was Inmarsat satellite technology."); Global Telephony Staff, *To The Rescue*, Global Telephony, Feb. 1999 (noting that Iridium satellite phones and free satellite service were distributed to disaster relief teams helping victims of Hurricane Mitch in Central America); Clayton Mowry, *Satellites Save Lives*, Satellite Communications, Feb. 1999; *COMSAT Satellite Phones Provide Voice and Data Communications To Aid Hurricane Mitch Relief Effort; Planet 1™ Phones and Service Donated for Disaster Relief Operations In Honduras and Nicaragua*, PR Newswire, Dec. 7, 1998; Tom Shean, *Insurers Swing Into Action*, The Virginian-Pilot (Norfolk, Footnote continues...

addition, MSS telephones are a staple of federal disaster teams focusing on national security³¹ and private disaster agencies such as the Red Cross.³²

C. Preserving The Existing 2 GHz MSS Allocation Will Ensure Prompt Delivery Of Vital Communications Services To All Areas And At All Times

The FCC's continued support of its 2 GHz MSS allocation policy not only will enhance communications capabilities during times of emergency and disaster, but also will significantly

VA), Aug. 26, 1998 (reporting that State Farm insurance company provided its adjusters with satellite phones to facilitate claims processing where telephone lines and antenna towers were toppled).

²⁶ See, e.g., Jane Reynolds, *Aid Pours In After Tornado In Rockingham*, News & Record (Greensboro, NC), Mar. 22, 1998.

²⁷ See, e.g., Paramvir Singh, *Telecommunications: Iridium Phones Provide Vital Link During Cyclone* Financial Express, Nov. 16, 1999 (reporting the widespread use of Iridium satellite phones by relief workers used by various agencies working with victims of the super cyclone which hit Orissa, India in September 1999); *Cyclone Belt Turns To Satellite*, The Dominion (Wellington), Apr. 14, 1998 (reporting that the telecommunications carriers of Fiji, Tonga, Samoa, Niue and the Solomon Islands were turning to satellite phones to provide communications during outages caused by cyclones).

²⁸ See, e.g., Mitchell Maddux & Justo Bautista, *Cold War Radio Links Priceless In Emergency Ham Operators Stepped In When Phone Systems Went Down*, The Record (Bergen County, N.J.), Sept. 17, 2000 (noting that floods caused by Tropical Storm Floyd in Bergen and Passaic counties left local emergency services without communications service, and that this led them to purchase satellite phones); *Inmarsat Comes to the Rescue of Homeless Flood Victims in North-East Italy; Satphones Deployed By Telecoms Sans Frontiers Form the Only Communications Link In Storm-Ravaged Regions*, M2 Presswire, Oct. 18, 2000.

²⁹ See, e.g., Shane Schick, *Globalstar Answers the Call for Nunavik's Communications*, Technology in Government, Dec. 2000, at 15; *INFOSAT Telecommunications -- Europeans No Longer 'Lost in Space'*, Canada NewsWire Ltd., Sept. 16, 1999 (noting the use of satellite phones by British Columbia's Forest Service for fighting forest fires.).

³⁰ See, e.g., Bill Roberts, *Telecom Without Borders: A Satellite Lifeline for Refugees*, Via Satellite, Feb. 1, 2000; *US Digital to Provide Iridium Satellite Phones to Kosovo Media And Disaster Relief Efforts; Dispatch Mobile Communications Services to Be Offered*, PR Newswire, Apr. 7, 1999.

³¹ See, e.g., Ed Timms, *Cleaning Hazardous Materials Gives Troops Practical Experience*, The Dallas Morning News, Oct. 10, 2000 (noting that the 6th Weapons of Mass Destruction (WMD) Civil Support Team of the National Guard, based in Austin, Texas, and one of several such National Guard units set up by the U.S. government to assist civilian authorities in the vent of a terrorist attack, utilizes satellite phone to maintain communications because "[i]n a disaster...phone lines and cell networks frequently can't handle the traffic."); *Troops Gaining Practical Experience Cleaning Hazardous Materials Along Texas Coast*, The Associated Press State & Local Wire, Oct. 5, 2000.

³² See Thai Thanh, *Red Cross Association Gets Ericsson Satellite Phones*, The Saigon Times Daily, March 30, 2001 (discussing presentation of satellite phones to the Vietnam Red Cross Association by Ericsson Vietnam to facilitate communications during emergency activities); Mohammed Harbi, *Humanitarian Solution to Hardware Restraints*, Communications Week International, June 29, 1998 (reporting how disaster relief agencies like the International Federation of Red Cross and Red Crescent Societies, the United Nations and Swiss Disaster Relief all rely heavily on satellite phone systems to respond to disasters); *American Red Cross and Globalstar USA Put Satellite Phones to Use for Disaster Relief*, Business Wire, July 27, 2000.

advance the universal service goals of the Communications Act of 1934, as amended (“Communications Act”), to ensure the availability of both basic and advanced services to all rural and underserved areas.³³ Maintaining its current allocation policy also will advance the FCC’s policy of encouraging the deployment of wireless services to Native American tribal lands.³⁴ Analysts predict that high-speed satellite systems will become the dominant delivery method for high-speed data and Internet services to rural and underserved areas and may capture between 5 and 10 percent of all high-speed subscribers within 10 years.³⁵

New ICO, in particular, already has successfully launched a satellite and has met the FCC’s first three milestones years ahead of schedule. New ICO will provide a variety of voice and data services to rural, low-income, and other underserved communities that have been largely ignored by terrestrial wireless and wireline service providers. These services can offer transmission speeds of up to 384 kbps in both directions. Furthermore, New ICO has made a specific, quantifiable commitment to offer service to noncommercial locations on Native American tribal lands at a discount of up to 50 percent from applicable retail rates, subject to consultation with the tribal governments.³⁶

³³ Section 1 of the Communications Act directs the Commission “to make available, so far as possible, to all the people of United States, without discrimination on the basis of race, color, religion, national origin, or sex, a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges.” 47 U.S.C. § 151. In addition, Section 706 of the Telecommunications Act of 1996 “to accelerate deployment of such [advanced telecommunications] capability by removing barriers to infrastructure investment and by promoting competition in the telecommunications market.” Pub. L. 104-104, Title VII, § 706, 110 Stat. 153 (1996) (reproduced in the notes under 47 U.S.C. § 157).

³⁴ See *Tribal Lands Report* at 11796 ¶ 1.

³⁵ See *Advanced Services Second Report* at 20990 ¶ 202 (citing T.W. Watts & W.W. Pitkin, Jr., Merrill Lynch *Global Satellite Marketplace*, at 99-101 (Apr. 1999)).

³⁶ See Ex parte letter from R.G. Salemme, Eagle River Investments LLC, & C. Tritt, Counsel for ICO Global Communications, to M.R. Salas, Secretary, FCC, at 1, *The Establishment of Policies and Service Rules for the Mobile-Satellite Service in the 2 GHz Band*, IB Docket No. 99-81 (Mar. 17, 2000). All filings in this docket will hereinafter be short cited.

II. THE CURRENT ASSIGNMENT OF 3.5x2 MHz OF SPECTRUM IS GROSSLY INADEQUATE TO SUPPORT SUCCESSFUL MSS SYSTEMS

The FCC initially has assigned 3.5x2 MHz of spectrum to each of the eight 2 GHz MSS licensees. At issue in this proceeding is whether, as an initial matter, the FCC should assign the remaining 7x2 MHz of MSS-allocated spectrum to the 2 GHz MSS licensees (i.e., “initial MSS spectrum”) and whether it should reallocate spectrum that a 2 GHz MSS licensee may abandon in the future for failure to meet the construction milestones (i.e., “abandoned MSS spectrum”).

New ICO and other 2 GHz MSS licensees repeatedly have expressed concern about the adequacy of the FCC’s assignment of initial MSS spectrum for each licensee. For example, Boeing previously requested use of a total of 17.1 MHz of 2 GHz MSS spectrum (consisting of 8.25 MHz for uplink and 8.85 MHz for downlink).³⁷ Celsat sought a total of 25x2 MHz of spectrum for its system.³⁸ Other parties also warned that the limited spectrum assignments to each 2 GHz MSS licensee would be “too small to permit economically viable MSS operations.”³⁹ In addition, New ICO previously noted that its capacity requirements for a commercially viable 2 GHz MSS system are at least 15x2 MHz.⁴⁰ Moreover, investors and financial institutions likely will be unwilling to provide capital for 2 GHz MSS systems unless those systems have access to sufficient spectrum capacity.

In addition to guaranteeing each authorized MSS operator a specified amount of spectrum within the 2 GHz band (“Selected Assignment”), the FCC’s 2 GHz MSS band plan was designed

³⁷ See Application of The Boeing Company, File No. STAT-LOA-19970926-00149, at 4, Attachment One at 5 (Sept. 26, 1997).

³⁸ See Amendment to Application of Celsat America, Inc., File No. SAT-AMD-19970925-00124, at 3 (Sept. 3, 1997).

³⁹ Supplemental Comments of the ICO USA Service Group, IB Docket No. 99-81, at 4 n.7 (Feb. 17, 2000) (“IUSG Supplemental Comments”).

⁴⁰ See SEC Form F-1 Registration of ICO Global Communications (Holdings) Limited, at 24 (June 12, 1998).

expressly to permit MSS operators to use on a secondary basis an unlimited amount of additional MSS spectrum outside their Selected Assignments.⁴¹ In fact, New ICO strongly supported this aspect of the FCC’s band plan because it would allow MSS operators to use additional spectrum “as needed to meet customer demand.”⁴² It also would offer MSS operators “substantial flexibility to make use of the bands in which they can optimally operate,” as well as “limit the cost and impact of transitioning incumbent licensees out of the 2 GHz MSS bands by enabling the first MSS licensee(s) to select bands in which incumbent operations are at a minimum.”⁴³ The reallocation of both initial and abandoned MSS spectrum will adversely affect early entrants, such as New ICO, that intend to make effective and cost-efficient use of spectrum that otherwise would lie fallow.

The 2 GHz MSS band plan also was intended to permit MSS operators to share their Selected Assignments among themselves.⁴⁴ Reallocating initial and abandoned MSS spectrum will frustrate the plans of MSS operators to maximize the amount of spectrum available to them through sharing arrangements. Consequently, depriving 2 GHz MSS licensees of even the bare minimum of spectrum critical for system expansion and long-term, commercial viability is a recipe for failure.

III. THE PROPOSED REALLOCATION OF 10 TO 14 MHz OF MSS SPECTRUM IS ARBITRARY AND CAPRICIOUS AND HARMS THE PUBLIC INTEREST

Although the FCC has exercised its authority to reallocate spectrum for other uses when the reallocation is found to serve the public interest, an abrupt reversal of the FCC’s 2 GHz MSS

⁴¹ *2 GHz MSS Rules Order* at 16139 ¶ 19, 16140 ¶ 21.

⁴² Comments of ICO Services Ltd., IB Docket No. 99-81, at 3 (Feb. 17, 2000).

⁴³ IUSG Supplemental Comments at 3.

⁴⁴ *2 GHz MSS Rules Order* at 16140-41 ¶ 22.

allocation policies would be unprecedented. Never before has the FCC allocated spectrum for a particular service, established service and licensing rules that provide for a designated amount of spectrum to qualified applicants, issued satellite authorizations to qualified applicants, and then just months later taken back spectrum, before allowing the licensees to launch and prove the commercial viability of their systems. In fact, the FCC has made tremendous efforts to encourage the development of other new wireless services and has watched these services flourish over the years.

A. Reallocation Of 2 GHz MSS Spectrum Is An Abrupt Turnabout On The FCC's Well-Considered Allocation Policy

The FCC's proposals to reallocate 10 to 14 MHz of MSS spectrum for advanced wireless services represents a radical departure from its 2 GHz MSS allocation policy.⁴⁵ This policy was developed over a number of years since 1992 and was reaffirmed less than a year ago when the FCC established its 2 GHz MSS licensing and service rules. Since the 1992 World Administrative Radio Conference ("WRC-92), the FCC actively has pursued international and domestic MSS allocations in the 2 GHz band. At the 1995 World Radiocommunication Conference ("WRC-95"), the United States assumed the leadership role in securing an agreement on a uniform date of entry for MSS worldwide. Specifically, WRC-95 conferees agreed to accelerate, by five years, the worldwide availability of 60 MHz of spectrum in the 2 GHz band

⁴⁵ Under the first proposal, the FCC would retain the original segmentation of 10 Selected Assignment pairs of 3.5 MHz. The eight MSS licensees would select eight of the ten 3.5 MHz paired Selected Assignments. Of the remaining two segments totaling 14 MHz, 10 MHz (at 2020-2025 MHz and 2165-2170 MHz) would be reallocated for advanced wireless services, while the remaining 4 MHz would be retained for future MSS system expansion or advanced wireless or other services. Under the second proposal, the FCC would distribute eight Selected Assignment pairs of 3.75 MHz, leaving 10 MHz (at 2020-2025 MHz and 2165-2170 MHz) for reallocation to other services. See *Advanced Wireless FNPRM* ¶¶ 25, 26.

(i.e., 1980-2010 MHz and 2170-2200 MHz) from January 1, 2005 to January 1, 2000.⁴⁶ The United States also successfully obtained at WRC-95 70 MHz of spectrum in the 2 GHz band (i.e., 1990-2025 MHz and 2165-2200) to permit the introduction of MSS in the United States and Canada beginning January 1, 2000.⁴⁷

In allocating the 2 GHz band to MSS, the Commission found that MSS will “provide another option for mobile communications, and would provide communications to underserved areas, such as rural and remote areas where PCS, cellular, and other mobile services are less feasible.”⁴⁸ The Commission subsequently affirmed on reconsideration that “the advent of ubiquitous MSS service will [offer]...benefits of robust competition among service providers.”⁴⁹ Only a year ago, the FCC found that 2 GHz MSS systems “will provide new and expanded regional and global data, voice, and messaging services,” “will enhance competition in mobile satellite and terrestrial communications services, and complement wireless service offerings through expanded geographic coverage,” and “will thereby promote development of regional and global communications to unserved communities in the United States, its territories and possessions, including rural and Native American areas, as well as worldwide.”⁵⁰ The FCC

⁴⁶ *Amendment of Section 2.106 of the Commission’s Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service*, First Report and Order and Further Notice of Proposed Rule Making, 12 FCC Rcd 7388, ¶ 8 (1997) (“2 GHz MSS Allocation Order”).

⁴⁷ *Id.*

⁴⁸ *Id.* at 7394-5 ¶ 13.

⁴⁹ *Amendment of Section 2.106 of the Commission’s Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service*, Memorandum Opinion and Order and Third Notice of Proposed Rule Making and Order, 13 FCC Rcd 23949, 23954 ¶ 11 (1998).

⁵⁰ *2 GHz MSS Rules Order* at 16128-29 ¶ 1.

further stated that it “remain[s] committed to encouraging the expeditious delivery of telecommunications services, via satellite services, to unserved communities.”⁵¹

The 2 GHz MSS licensees have invested billions of dollars in reliance upon the U.S. government’s commitment to the ITU to support an international allocation of 2 GHz frequencies to MSS and upon the Commission’s 2 GHz MSS domestic allocation and service rule proceedings undertaken to implement that commitment. For example, New ICO’s shareholders have already invested fully \$3.7 billion for the global network New ICO plans to deploy, and have committed another \$1.4 billion to vendors. An additional \$3.5 billion is estimated to be necessary in order to launch the ICO service. A turnabout on the FCC’s MSS allocation policy not only would severely harm the MSS industry financially, but also would fundamentally undermine the integrity of the FCC’s process and fuel investors’ doubts regarding the certainty of the FCC’s spectrum allocation and licensing activities. This result would completely undermine the interests of the already shaken telecommunications industry as a whole, whether terrestrial or satellite.

B. Reallocation Of 2 GHz MSS Spectrum Would Betray The FCC’s Policy Of Fostering The Development And Growth Of New Services

In a radical departure from precedent, reallocation of MSS spectrum would contravene the Commission’s policy of allowing promising new services adequate time to build a subscriber base. If the Commission were to manage spectrum in this fashion, it would have eliminated services such as DBS, cellular, FM, and UHF long before any of them had built a significant subscriber base or even commenced service roll-out.⁵² For example, the FCC allocated

⁵¹ *Id.* at 16145 ¶ 33.

⁵² For a detailed discussion of the FCC’s efforts to nurture the development of DBS, cellular, FM, and UHF services, *see* Ex parte letter from The Boeing Company, CCI International NV, Mobile Communications Holdings, Inc., New Footnote continues...

spectrum, adopted service rules, and granted its first authorizations for Direct Broadcast Satellite (“DBS”) service in 1982.⁵³ During the “pioneering era” of DBS technology in the 1980’s, the FCC granted numerous extensions of its construction “due diligence” milestones.⁵⁴ The first DBS system did not commence service until approximately 10 years after the FCC first granted DBS construction permits.⁵⁵

Despite efforts by terrestrial system operators to obtain reallocation of DBS spectrum to terrestrial uses, the FCC was steadfast in its support of DBS. In 1986, the FCC rejected requests to reallocate DBS spectrum by terrestrial operators who argued that DBS would not succeed in the marketplace.⁵⁶ United States Satellite Broadcasting Company (“USSB”), a DBS permittee, requested the FCC to clarify that DBS licensees would be permitted to provide “non-conforming” services, such as data, voice communications, and other non-video services, in addition to their “conforming” video programming services. USSB stated that such use would allow DBS operators to secure necessary financial commitments and accelerate the deployment of DBS. Terrestrial operators, however, argued that USSB’s request amounted to an admission of the failure of DBS and that the DBS allocation thus should be eliminated. In rejecting the dire predictions of the failure of DBS, the FCC reaffirmed its initial DBS allocation and found that no

ICO Global Communications (Holdings) Ltd., and TMI, to M.R. Salas, Secretary, FCC, Attachment 1 (June 29, 2001).

⁵³ See *Inquiry into the Development of Regulatory Policy in Regard to Direct Broadcast Satellites*, 90 FCC 2d 676 (1982); *Advanced Communications Corp.*, 11 FCC Rcd 3399, 3402 ¶ 5 (1995).

⁵⁴ See *Advanced Communications Corp.*, 11 FCC Rcd 3399, 3408-09 ¶ 21 (1996). Under its DBS rules adopted in 1982, the FCC required each DBS permittee to satisfy a two-prong due diligence requirement. Specifically, the FCC required DBS permittees to begin construction or complete contracting for construction of their systems within one year of grant of their construction permits. DBS permittees also were required to commence operation within six years after grant of their permits.

⁵⁵ *Id.* at 3409-10 ¶ 24.

⁵⁶ See *United States Satellite Broadcasting Co., Inc.*, 1 FCC Rcd 977, 977-78 ¶ 5 (1986).

significant events had occurred since its initial allocation warranting a reversal of its findings regarding the public interest benefits of DBS.⁵⁷ Although it took many years for the DBS service to mature, it has emerged as the principal competitor to cable, gaining more than 8,000 new subscribers a day with an annual subscriber growth rate of 31 percent.⁵⁸

There has been no material change in circumstances that warrants the FCC's reversal of its prior determination that 2 GHz MSS serves the public interest. If anything, the difficulties of some MSS licensees, including New ICO, warrant additional measures to provide spectrum flexibility, such as permitting the use of an ancillary terrestrial component ("ATC").⁵⁹

IV. REALLOCATION OF 2 GHz MSS SPECTRUM FOR TERRESTRIAL USES WILL DELAY SERVICE TO THE PUBLIC AND DISCOURAGE THE MOST EFFICIENT USE OF THE SPECTRUM

In carrying out its spectrum management responsibilities, the Commission strives to facilitate the rapid deployment of new services, encourage efficient and intensive spectrum use, and provide sufficient spectrum allocation to support the growth of new services. Reallocation of the 2 GHz MSS spectrum will not effectively advance any of these objectives.

A. Reallocation Will Delay Deployment Of Services To Rural And Underserved Areas

Throughout the 2 GHz MSS proceeding, the Commission has stressed that MSS systems are uniquely designed to serve rural and underserved areas. In contrast, terrestrial wireless systems do not and are not likely in the near future to provide service to most rural and

⁵⁷ *Id.* at 978 ¶ 7.

⁵⁸ See *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Seventh Annual Report, CS Docket No. 00-132, FCC No. 01-1, ¶ 65 (Jan. 8, 2001) (citation omitted).

⁵⁹ See *Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Band*, Notice of Proposed Rulemaking, FCC No. 01-225 (Aug. 17, 2001).

underserved areas because of technical or economic constraints.⁶⁰ Although MSS licensees such as New ICO are close to launching service to these areas,⁶¹ there is ample evidence that terrestrial carriers may not deploy 3G systems as quickly as predicted.⁶² In addition, the Commerce Department has sent draft legislation to Congress proposing to postpone the statutory deadline for auctioning the 1710-1755 MHz and 2110-2150 MHz bands for 3G use until September 30, 2004.⁶³ Unless infrastructure costs drop substantially, no system incentives exist for terrestrial wireless service providers to build out in those areas. By contrast, the global coverage afforded MSS provides all the incentives needed to bring advanced voice and data services to rural and underserved areas.

B. Reallocation Will Not Foster Efficient And Intensive Use Of The Spectrum

MSS system architectures provide far greater coverage than terrestrial systems. As demonstrated in Section I above, a single ICO satellite covers the entire United States and beyond. In comparison, the coverage of existing terrestrial wireless systems is spotty at best.

In addition, a reallocation of 2 GHz MSS spectrum for terrestrial uses would be inconsistent with international MSS allocations and thus impair, rather than promote, the

⁶⁰ Many areas within the U.S. that can be covered by MSS systems, such as the Great Lakes and parts of the U.S. National Parks, are not served adequately by terrestrial mobile systems. For example, FCC data indicates that at least 60 percent of the total land area of the United States is served at most by only two terrestrial mobile telephone systems. See *CMRS Annual Report* at 24-25. FCC data also indicates that at least 43 percent of the total land area of the United States is not served by any terrestrial digital mobile telephone system. *Id.* at 27.

⁶¹ New ICO already has successfully launched its first satellite and has met its first three milestones years ahead of schedule.

⁶² See, e.g., “3G” Squeezed by Other Wireless Systems, Newsbytes (May 21, 2001) (report by Merrill Lynch finds that “technical challenge of building a next-generation cellular network is proving difficult for even the most advanced wireless carriers”), at www.newsbytes.com/news/01/165960.html; *South Korea Delays “3G” Plans Because of Investment Concerns*, Telecommunications Report (Mar. 5, 2001) (delay in South Korean plans to deploy 3G services).

⁶³ See *Commerce Seeks “3G” Auction Deadline Delay; New NTIA Chief Victory Outlines Goals for Agency*, Telecommunications Reports (Sept. 10, 2001).

efficient use of the spectrum. As the FCC has acknowledged repeatedly, “wireless and, especially, satellite systems operate most efficiently in a globally consistent allocation of contiguous spectrum.”⁶⁴ Spectrum harmonization allows for simplification in system design—transmitting, for example, on one set of frequencies rather than a hodgepodge of disparate frequencies scattered across the world—and greatly reduced infrastructure costs. Moreover, there is mounting evidence that terrestrial wireless carriers’ appetite for spectrum is overstated and not justified by existing or projected consumer demand.⁶⁵ Other federal agencies and industry analysts all have raised serious concerns regarding the consumer demand for and spectrum needs of 3G. For example, the Acting Assistant Secretary of Defense recently testified before the Senate Communications Subcommittee that:

While the World Radiocommunication Conference of 2000 identified a need for additional 160 MHz of spectrum for 3G, there is reasonable doubt about whether this assessment is valid for the United States and uncertainty about the timeline for meeting any additional needs. We believe that the spectrum needs of the US wireless mobile industry should be updated and refined and timelines for such spectrum spelled out. The US has a much lower population density than Europe or Asia, so that requirements for 3G personal communications devices may be smaller than either of these regions....Finally, the amount of spectrum needed for 3G is undetermined because the demand for 3G services is unknown at this point. Many industry observers believe that second generation wireless services...with

⁶⁴ *Allocation and Designation of Spectrum for Fixed-Satellite Services in the 37.5-38.5 GHz, 40.5-41.5 GHz and 48.2-50.2 GHz Frequency Bands*, Further Notice of Proposed Rule Making, 16 FCC Rcd 12244, 12248 ¶ 8 (2001) (“FSS FNPRM”).

⁶⁵ See, e.g., *Only Three Companies Apply for Belgium’s “3G” Licenses*, Telecommunications Report (Feb. 12, 2001) (reporting “scant interest” in 3G licenses in Belgium); *Singapore Government Reduces Bid Fees for April “3G” Auction*, Telecommunications Report (Mar. 12, 2001) (Singapore government officials acknowledge “weak market” for 3G services); *Disappointing Wireless Auction*, The New York Times (Mar. 24, 2001) (revenues from Australia’s auction of 3G licenses fall below government’s expectations); *Spectrum Shortage*, Red Herring Magazine (Sept. 1, 2000) (“demand for wireless Internet service in the United States hasn’t reached the same levels it has in Europe or Asia, where mobile penetration is greater”), at www.redherring.com.

enhancements (high speed voice and data connection, but not streaming video) will be sufficient for most truly mobile users.⁶⁶

A recent study by Merrill Lynch found that “[n]ext-generation phones have yet to stimulate demand, in part due to limited handset availability today and also to lack of interesting applications to draw user interest longer term.”⁶⁷ Another study found that the high service charges necessary to permit 3G operators to recover their license costs will deter consumer acceptance of 3G services.⁶⁸

The spectrum wastefulness of the *status quo* stems from the fact that satellite-only MSS networks cannot use their spectrum effectively in urban settings, while terrestrial networks cannot use their spectrum economically in rural environments. If the FCC adopts the proposal to authorize ATC, this would substantially enhance the efficient use of the spectrum by MSS operators. Specifically, implementation of ATCs will improve spectrum efficiency not by altering the number of times spectrum is re-used in different beams of a particular satellite system, but rather by enabling the already assigned MSS spectrum to become useful in urban areas. To date, both mobile and MSS allocations have been managed in such a way that a given band is used to serve rural areas or urban areas – but not both. Use of integrated ATCs would avoid this spectrum wastefulness by allowing a single network operator to optimize a single

⁶⁶ Testimony of Dr. Linton Wells II, Acting Assistant Secretary of Defense, before the Communications Subcommittee of the Senate Committee on Commerce, Science and Transportation Committee (July 31, 2001).

⁶⁷ *Merrill Lynch Predicts First-Ever Decline in Mobile Phone Handset Sales in 2001*, TR Daily (Sept. 5, 2001).

⁶⁸ *Is 3G Another Wireless Net Disaster?*, allNetDevices (Jan. 22, 2001), at www.allnetdevices.com/industry/reality/2001/01/22/is_3g.html. An additional study by Strategy Analytics similarly found that 3G applications such as multimedia will not succeed and predicted that 3G services will account for less than a quarter of the wireless data revenues by 2010. *Id.* Yet another study by SRI Consulting Business Intelligence found that there is “no evidence indicating that consumers are willing to pay premiums for higher-cost 3G services.” *3G Interrupted*, ISP-Planet (Aug. 3, 2001), at www.isp-planet.com/politics/2001/3g_interrupted.html. Even wireless industry executives such as Keiichi Enoki, DoCoMo’s managing director for i-mode services, have noted that “faster data speeds will do little to spur consumers to use small-screen phones for hours at a time.” *Is 3G Another Wireless Net Disaster?*, allNetDevices (Jan. 22, 2001), at www.allnetdevices.com/industry/reality/2001/01/22/is_3g.html.

allocation in such a way that both rural and urban areas will be served by the most efficient and appropriate network architecture.⁶⁹

C. Reallocation Will Unfairly Foreclose 2 GHz MSS Licensees From Future Expansion

A central premise of the Commission's 2 GHz MSS policy has been that spectrum would be made available for 2 GHz MSS operators to grow their business. In the *2 GHz MSS Report and Order*, for example, the Commission suggested that unassigned and/or abandoned 2 GHz MSS spectrum could become available for expansion of systems that become operational.⁷⁰ In the *Advanced Wireless FNPRM*, the Commission maintained that "any reallocation of existing MSS spectrum [shall] not significantly impair any of the current licensees' rights and reasonable expectations to retain its current assigned spectrum allotment and acquire additional MSS spectrum for purposes of deploying and operating a fully matured 2 GHz MSS system."⁷¹

The Open-Market Reorganization for the Betterment of International Telecommunications Act (the "ORBIT Act") prohibits the Commission from auctioning spectrum used for the provision of international or global satellite communication services, such as MSS.⁷² In view of this restriction, the Commission should not auction any reallocated 2 GHz

⁶⁹ The techniques available to achieve these efficiencies within a single integrated network – including elements of network design, dynamic resource management protocols, admission controls, and other techniques – are discussed in more detail in part IV, *infra*.

⁷⁰ *2 GHz MSS Rules Order* at 16139 ¶ 18.

⁷¹ *Advanced Wireless FNPRM* ¶ 29.

⁷² *Open-Market Reorganization for the Betterment of International Telecommunications Act*, Pub. L. No. 106-180, 114 Stat. 48, § 647 (2000). The Commission has questioned whether auctions should be used for global satellite services. For example, the Commission noted that "a [global] satellite system operator proposing to serve only the United States may be willing to bid higher for a U.S. license than a satellite system operator proposing to serve multiple regions, because the U.S.-only system would face considerably fewer contingencies. Thus, auctions might prevent entry by satellite systems interested in providing global service, even though these systems may provide services valued more highly by consumers." *Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended*, Notice Of Proposed Rulemaking, 14 FCC Rcd 5206, 5240 ¶ 65 (1999). See also, *Amendment of Part 25 of the Commission's Rules to Establish Rules and Policies Pertaining to the Second Processing Round of* Footnote continues...

MSS spectrum because it would unfairly deprive 2 GHz MSS licensees of even the opportunity to compete with terrestrial users for that spectrum.

To auction the spectrum for other services before the 2 GHz MSS licensees have had a chance to commence service would presume that the FCC is better suited to dictate consumer tastes and growth opportunities for new services in the United States than the American people who consume communications services. This approach is antithetical to the Commission's flexible spectrum policy, which correctly recognizes that services are most efficiently dictated by the marketplace. If the Commission intends to act consistently with previous 2 GHz MSS policies, 2 GHz MSS licensees must at least be provided a fair opportunity to acquire additional spectrum for system expansion.

V. ANY REALLOCATION OF 2 GHz MSS SPECTRUM MUST BE LIMITED IN SCOPE WITH MAXIMUM FLEXIBILITY AND MINIMUM RELOCATION BURDEN

As discussed above, the Commission should preserve the existing 2 GHz MSS allocation to allow MSS licensees a full opportunity to prove their systems in the marketplace. If, however, the Commission decides to reallocate some initial and abandoned MSS spectrum, it must not reallocate any more than a total of 5x2 MHz of spectrum, so as to preserve the international allocation of the 2170-2200 MHz band for MSS worldwide. Adherence to this international MSS allocation is particularly important to U.S. credibility in international fora, since it was the United States that led the initiative for a global MSS allocation at WRC-92, then reversed course by refusing to honor that allocation, and finally convinced WRC-95 to adopt the current 2 GHz allocations for MSS worldwide. In addition, as New ICO noted in prior filings, the FCC must

the Non-voice, Non-geostationary Mobile Satellite Service, Notice of Proposed Rulemaking, 11 FCC Rcd 19841, 19869 ¶ 82 (1996).

not reallocate any 2 GHz MSS spectrum unless it also enables 2 GHz MSS operators to make full use of their limited spectrum by authorizing ATC use.⁷³ Furthermore, if reallocation is deemed necessary, the Commission should reallocate any spectrum in the 2 GHz MSS uplink band for use by incumbent Federal government users who may be displaced from the 1.7 GHz band.

A. Retaining The 2170-2200 MHz Band For MSS Is Critical To Ensuring Conformance With International MSS Allocations

Although the FCC may decide to reallocate a limited amount of initial and abandoned MSS spectrum, it must preserve the international allocation of the 2170-2200 MHz band for MSS worldwide. In adopting its current 2 GHz MSS allocation policy, the FCC noted the importance of harmonizing its domestic MSS allocation with the rest of the world by stating that “any 2 GHz MSS allocation should be as consistent as possible with the WARC-92 and WRC-95 allocations.”⁷⁴ The FCC and other parties participating in the U.S. delegation to the World Radiocommunication Conferences have invested substantial time, effort, and resources in securing additional international allocations for MSS in the 2 GHz band and harmonizing U.S. domestic MSS allocation policies with the rest of the world. Moreover, the FCC has recognized that “wireless and, especially, satellite systems operate most efficiently in a globally consistent allocation of contiguous spectrum.”⁷⁵ Since only a limited amount of spectrum in the 2 GHz band is allocated to MSS worldwide (i.e., 1980-2010 MHz and 2170-2200), any domestic allocation conflicting with this international MSS allocation would severely undermine the

⁷³ See Ex parte letter from C. Tritt, Counsel for ICO to M.R. Salas, Secretary, FCC, IB Dckt. No. 99-81, at 3 (May 25, 2001).

⁷⁴ 2 GHz MSS Allocation Order at 7395 ¶ 14.

⁷⁵ FSS FNPRM at 12248 ¶ 8.

FCC's international harmonization goals and deprive the public of the benefits of truly global MSS systems.

Any significant reversal of the domestic MSS allocation will further undermine U.S. credibility with the international community, which has seen the U.S. change position on this matter twice in the last decade. The U.S. government, represented by the FCC, led the initiative for an international allocation of global MSS at WRC-92. Consequently, at the urging of the United States, WRC-92 allocated the 1930-1980 MHz and 2120-2170 MHz bands to MSS in Region 2 (which includes the Americas and Greenland).⁷⁶ WRC-92 also allocated the 1980-2010 MHz and 2170-2200 MHz bands to MSS worldwide.⁷⁷ After WRC-92, the FCC reversed course by allocating the 1850-1990 MHz band terrestrial broadband Personal Communications Services, rather than adhering to WRC-92's MSS allocations. As a result of the FCC's failure to allocate MSS spectrum consistent with WRC-92's allocations, the U.S. had to return to WRC-95 to pursue additional international allocations for MSS. WRC-95 consequently allocated the 2010-2025 MHz band to MSS in Region 2.⁷⁸ If the FCC reverses its domestic MSS allocation policies yet again, it would further undermine the ability of the U.S. to effectively press its position at future WRCs. Consequently, the FCC must not reallocate more than a total of 5x2 MHz of both initial and abandoned MSS spectrum. Reallocation of any additional amount of 2 GHz MSS spectrum would conflict with the international MSS allocation at 2170-2200 MHz.

⁷⁶ See *2 GHz MSS Allocation Order* at 7389 ¶ 2 (citing Final Acts of the 1992 World Administrative Radio Conference, Malaga-Torremolinos (1992)).

⁷⁷ *Id.*

⁷⁸ *Id.* at 7392 ¶ 8.

B. Reallocation Of Any MSS Spectrum Is Unwarranted, Although Approval Of ATC May Make The Set-Aside Spectrum Unnecessary

If the Commission authorizes ATC, as New ICO strongly advocates, 2 GHz MSS operators will have flexibility to use spectrum more efficiently. ATC use therefore may alleviate the need for the full amount of spectrum that is currently set aside for system expansion (the “Set-Aside”). The Commission created the Set-Aside as an incentive for MSS licensees to serve underserved areas.⁷⁹ MSS licensees, however, already will have enormous incentives to extend service to the entire United States, including underserved areas, especially if they are given maximum flexibility to make efficient use of their authorized spectrum. In particular, ATC will increase consumer demand for MSS, decrease equipment and service costs, and improve spectrum efficiency by ensuring that MSS frequencies will be used in urban and indoor areas that otherwise would be unable to receive attenuated satellite signals. All of these benefits will enhance the economic viability of MSS systems and their ability to provide affordable service to underserved communities. Consequently, spectrum-based incentives such as the Set-Aside may not be necessary to encourage MSS licensees to serve those in rural and remote areas.⁸⁰ As noted in Section VI(A) below, if the FCC reallocates the Set-Aside and MSS operators undertake to clear spectrum at 2008-2025 MHz, relocation costs may need to be shared proportionately with later entrants, even if those entrants do not use the spectrum until after the 10-year sunset period.

Although reallocating the Set-Aside for other uses may be tenable if the Commission authorizes ATC for 2 GHz MSS systems, New ICO firmly opposes reallocating at this time any

⁷⁹ See *2 GHz MSS Rules Order* at 16146 ¶ 34.

⁸⁰ See Ex parte letter from C. Tritt, Counsel for ICO to M.R. Salas, Secretary, FCC, IB Docket No. 99-81, at 3 (May 25, 2001).

additional spectrum that is currently reserved for MSS use. In adopting its 2 GHz MSS band plan, the Commission attempted to provide each qualified MSS applicant with the maximum amount of available spectrum, while also accommodating all qualified applicants within the 2 GHz band. As discussed in Sections I, III, and IV above, there has been no material change in circumstances suggesting that depriving 2 GHz MSS licensees full use of their allocated spectrum will better serve the public interest or that other wireless users will make more effective or efficient use of the spectrum in a more timely manner.

C. Any Reallocated 2 GHz MSS Uplink Spectrum Should Be Made Available For Use Only By Displaced, Incumbent Federal Government Users

If the Commission decides to reallocate the Set-Aside spectrum and a limited amount of abandoned MSS spectrum in the uplink band, it should reallocate the spectrum for use by incumbent Federal government users who may be displaced from the 1.7 GHz band, rather than by new advanced wireless entrants. This reallocation will provide replacement spectrum to permit the continued support of critical federal government operations, such as national defense, law enforcement, and control of electrical power transmission.⁸¹ At the same time, the reallocation will benefit new advanced wireless entrants by facilitating the clearing of spectrum in the 1.7 GHz band for advanced wireless uses.

In addition, by reallocating a limited amount of 2 GHz MSS uplink spectrum for use by displaced federal government incumbents, the Commission may substantially reduce the relocation costs of Broadcast Auxiliary Service (“BAS”) incumbents. As discussed in Section IV(A) above, the reallocation of MSS spectrum for other uses likely will require the relocation of

⁸¹ See U.S. Department of Commerce, National Telecommunications and Information Administration, *The Potential for Accommodating Third Generation Mobile Systems in the 1710-1850 MHz Band: Federal Operations, Relocation Costs, and Operational Impacts*, Final Report, at xiv (Mar. 2001) (“NTIA Final Report”).

BAS incumbents in one step and thus impose exorbitant, up-front relocation costs on 2 GHz new entrants. These costs, however, could be minimized if the Commission waits until after Phase I of the Commission's 2 GHz relocation plan to implement the reallocation of some MSS spectrum for displaced Federal government use. By delaying this reallocation until after Phase I, the Commission would not need to abandon its phased relocation plan.

Moreover, displaced Federal government incumbents are unlikely to require replacement in 2 GHz spectrum before the end of Phase I. In particular, the NTIA Final Report concludes that Federal government incumbents in the 1755-1850 MHz band "will be unable to fully vacate this band until well beyond the time lines established for this study (*i.e.*, 2003, 2006, and 2010)."⁸² The report similarly concludes that most Department of Defense non-space systems will not be able to vacate the 1755-1850 MHz band until beyond 2010.⁸³ Thus, since it is possible that Federal government incumbents may not even be relocated from the 1755-1850 MHz band until after 2010, those displaced incumbents will not need replacement 2 GHz spectrum until after the 10-year sunset period for BAS relocation and thus will not be required to pay any BAS relocation costs.⁸⁴

VI. THE FCC MUST NOT ADOPT ANY MODIFICATION OF ITS EXISTING 2 GHz RELOCATION PLAN THAT WOULD ADD EXORBITANT COSTS TO THE DELIVERY OF MSS

A reallocation of some 2 GHz MSS spectrum will substantially increase the costs of relocating BAS and fixed service microwave ("FS") incumbents. If the FCC decides to reallocate some spectrum for terrestrial use, it must ensure that 2 GHz MSS licensees are not

⁸² *Id.* at xv.

⁸³ *Id.*

⁸⁴ The 10-year sunset period for BAS relocation expires on September 6, 2010. *See Advanced Wireless FNPRM* ¶ 32.

required to bear any relocation costs greater than those that would have been incurred under the existing relocation plan.⁸⁵ Rather, all additional BAS and FS relocations costs should be borne by the new terrestrial entrants in the 2 GHz band.

A. MSS Operators Must Not Be Required To Bear BAS Relocation Costs Greater Than Those Under The FCC’s Phased Relocation Plan

As noted in the *Advanced Wireless FNPRM*, the reallocation of MSS spectrum such as those frequencies at 2020-2025 MHz could require the relocation of incumbent BAS operations in one step, rather than in gradual phases.⁸⁶ An abandonment of the FCC’s existing phased relocation plan would require all BAS licensees to be relocated immediately at enormous expense. Unlike the relocation of incumbents in other bands, the FCC recognized that the relocation of BAS incumbents in the 2 GHz band will be a massive undertaking. The FCC therefore adopted its phased relocation plan with an express objective of minimizing relocation costs for MSS operators.⁸⁷ Specifically, the FCC stated that “[b]ecause of the need for nationwide relocation by relatively few licensees, we believe it is necessary to minimize costs to the extent possible for MSS licensees, and to defer costs where possible so that they can be paid on an ongoing basis, rather than in lump sum.”⁸⁸ Consequently, the FCC found that its phased plan “will allow new MSS licensees to spread out the cost of BAS relocation over several years, *and pay much of the cost out of operating revenues, rather than start-up capital.*”⁸⁹

⁸⁵ The point here is not that the FCC’s existing relocation plan is perfect or even adequate; it is simply that 2 GHz MSS licensees should not be made worse off as a result of any changes to the relocation plan.

⁸⁶ See *Advanced Wireless FNPRM* ¶ 33.

⁸⁷ *2 GHz MSS Relocation Order* at 12324 ¶ 27.

⁸⁸ *Id.*

⁸⁹ *Id.* at 12327 ¶ 35 (emphasis added).

The plan attempts to minimize the financial burdens on MSS operators. Under the plan, 18 MHz of former BAS spectrum at 1990-2008 MHz must be cleared for MSS use during Phase I. The first MSS operators will be required to relocate BAS licensees in the top 30 markets before commencing operations. The first MSS operators also will be required to relocate BAS licensees in the next 70 largest markets within 3 years after commencing operations. During Phase II, which will commence when Phase I spectrum is no longer sufficient to meet MSS needs, MSS operators will be required to relocate BAS licensees from the 2008-2023 MHz band in the top 30 markets before operating in that band. BAS relocation in the next 70 largest markets must be completed within three years after commencement of MSS in the 2008-2023 MHz band. BAS relocation from the 1990-2023 MHz band must be completed in all markets within five years after commencement of MSS operations in the 2008-2023 MHz band.⁹⁰ The final MSS licensee that uses the 2023-2025 MHz band may not commence operations until all BAS licensees have been relocated or September 6, 2010 (the sunset date after which MSS licensees will not be required to relocate BAS licensees), whichever is earlier.⁹¹

The FCC correctly recognized the unique requirements for relocating BAS incumbents to accommodate MSS. Specifically, the FCC stated:

“Our relocation policy was designed to allow gradual relocation of incumbents on a link-by-link basis during a geographical build-out period. *A gradual build-out is not possible in the case of MSS, because the MSS signal will reach a large geographical area simultaneously.* The integrated nature of BAS also makes isolated, link-by-link relocation infeasible.”⁹²

⁹⁰ *Amendment of Section 2.106 of the Commission’s Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service*, Second Report and Order and Second Memorandum Opinion and Order, 15 FCC Rcd 12315, 12325 ¶ 27 (2000) (“2 GHz MSS Relocation Order”).

⁹¹ *Id.* at 12327 ¶ 33, 12333 ¶ 53; *Advanced Wireless FNPRM* ¶ 32.

⁹² 2 GHz MSS Relocation Order at 12325 ¶ 27 (emphasis added).

In proposing a phased relocation plan, New ICO provided evidence that a simultaneous national cut-over would be infeasible because of the sheer costs involved and the burden on manufacturers of BAS equipment and skilled personnel needed to retune BAS equipment. If the FCC requires relocation of BAS operations in one step, the estimated costs of relocation would increase by approximately \$380 million and under the FCC's proposal require 2 GHz new entrants to share these exorbitant costs before they can initiate service.⁹³ New ICO previously noted that \$200 million of relocation costs imposed on MSS providers likely would increase the cost of 2 GHz MSS by 83 cents per minute.⁹⁴ This new and unanticipated financial burden will threaten the economic viability of MSS systems.

Because any reallocation of spectrum would be implemented in order to provide additional spectrum for other users, those users should bear the additional costs imposed by the abandonment of the phased relocation plan. In other words, MSS operators should be required to pay only those relocation costs they would have had to incur in relocating BAS operations during

⁹³ This estimate is based on the following calculation and assumptions. In implementing the FCC's relocation plan in one step, digital compressed (i.e., MPEG-2) equipment will be required to replace the FM-TV analog BAS transmitters and receivers. The average cost per 2 GHz ENG transmitter (incorporating integrated encoder, QPSK modulator, and a linear amplifier for the transmitter) is estimated to be \$60,900. The average cost per 2 GHz ENG receiver (incorporating frequency translator and L-band IRD unit) is estimated to be \$8,740. These estimated costs are based on a study commissioned by New ICO in 1998. In addition, according to an engineering study commissioned by the National Association of Broadcasters and submitted to the FCC in 1995, it is estimated that the number of mobile and portable (Tripod-to-Van) ENG transmitters is 5,500 and the number of fixed (Receive-Only) sites and portable ENG receivers is 5,032. See Joint Reply Comments of the Association for Maximum Service Television, Inc. and Other Major Television Broadcasting Entities, *Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service*, ET Docket No. 95-18, Exh. B (*Estimate of Relocation and Retrofit Costs for the 2 GHz Television Broadcast Auxiliary Band in Order to Accommodate MSS*, prepared by Hammet & Edison Consulting Engineers) (June 21, 1995). Consequently, the estimated relocation costs of a simultaneous national cut-over is calculated by adding the product of \$60,900 and 5,500 ENG transmitters to the product of \$8,740 and 5,032 ENG receivers (i.e., $(\$60,900 \times 5,500) + (\$8,740 \times 5,032) = \$378.93$ million). This is a very conservative estimate, since the cost estimates are based on 1998 data and the estimated number of BAS units does not include other BAS equipment that may need to be replaced.

⁹⁴ See Ex parte letter from C. Tritt, Counsel for ICO Global Communications, to M.R. Salas, Secretary, FCC, at 2, *Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service*, ET Docket No. 95-18 (Mar. 2, 2000); Ex parte letter from C. Tritt, Counsel for ICO, to M.R. Salas, *Footnote continues...*

Phase I of the original plan. Furthermore, if MSS operators and other new entrants do not need to use spectrum at 2008-2025 MHz before the end of the 10-year sunset period, then, consistent with the FCC's existing relocation rules, they will not pay any relocation costs to clear that spectrum.⁹⁵ If, however, MSS operators decide to clear spectrum at 2008-2025 MHz at any time during the 10-year sunset period, then relocation costs must be shared proportionately with all other new entrants, even if those entrants do not use the spectrum until after the sunset period. This result also is consistent with the FCC's existing relocation rules, which generally require all later entrants that benefit from the spectrum clearing efforts of prior entrants to share the relocation costs on a proportionate basis.⁹⁶

B. Reallocation Of MSS Downlink Spectrum Will Limit The Availability Of Spectrum And Increase FS Relocation Costs

By reallocating spectrum in the 2 GHz MSS downlink band, the FCC will increase FS relocation costs by limiting the availability of less encumbered spectrum for use by 2 GHz MSS operators and restricting the ability to retune existing FS equipment as a means of relocating FS incumbents. Under the existing relocation plan, 2 GHz MSS operators are not required to relocate FS incumbents with whom they are able to share spectrum. Thus, in order to minimize their relocation costs, 2 GHz MSS operators are encouraged to select downlink spectrum that is least encumbered by FS incumbents with conflicting use. Reallocating a portion of the 2 GHz MSS downlink spectrum, however, will reduce the availability of spectrum and thereby increase the costs of relocating incumbent FS operations that are unable to share spectrum with MSS.

Secretary, FCC, *Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service*, ET Docket No. 95-18 *et al.*, Chart 2 (Oct. 1, 1999).

⁹⁵ 2 GHz MSS Relocation Order at 12333 ¶ 53.

⁹⁶ *Id.* at 12337 ¶ 67.

Furthermore, under the existing relocation plan, 2 GHz MSS operators will use spectrum on an as-needed basis and are not expected to use immediately the full MSS downlink allocation. Thus, for example, in clearing a portion of spectrum in the downlink band to accommodate MSS needs, the first MSS operators would be permitted under the FCC's relocation plan to retune FS equipment to other frequencies within the downlink band. If, however, a portion of the MSS downlink spectrum is reallocated for terrestrial uses, the amount of 2 GHz spectrum available for retuning FS equipment will be severely limited. Thus, the first MSS operators may be required to relocate FS incumbents to spectrum entirely outside of the MSS downlink band. In that case, retuning existing FS equipment may no longer be a sufficient means of FS relocation. Rather, the first MSS operators may be forced to bear the much higher costs of replacing FS equipment. Consequently, because reallocation of 2 GHz MSS downlink spectrum will increase FS relocation costs, any additional relocation costs should be borne by the new terrestrial entrants, who will benefit directly from the reallocation.

VII. THE FCC SHOULD ENCOURAGE MORE INTENSIVE AND EFFICIENT USE OF THE MSS SPECTRUM BY PERMITTING 2 GHz MSS LICENSEES TO FREELY TRANSFER THEIR SPECTRUM RIGHTS

To alleviate spectrum scarcity and encourage more intensive and efficient use of existing MSS spectrum, the FCC should permit greater flexibility in the transfer of the spectrum rights of 2 GHz MSS licensees. As an initial matter, the FCC should interpret the anti-trafficking rule, as set forth in Section 25.143(g) of its rules, to permit 2 GHz MSS licensees freely to assign or transfer control of their licenses. The FCC further should allow licensees greater flexibility to lease spectrum from and share satellite infrastructure with other licensees. These deregulatory

actions are fully consistent with the FCC's policy of fostering robust secondary markets in spectrum usage rights.⁹⁷

The FCC has found that for most spectrum, the best means of achieving its goals of alleviating spectrum scarcity and increasing spectral efficiencies is “to allow market forces to direct the distribution of spectrum resources among specific users and uses.”⁹⁸ Consistent with this market-based approach to licensing, the FCC has launched an initiative aimed at identifying and eliminating obstacles to the successful operation of secondary spectrum markets.⁹⁹ As the FCC explains, “a robust and effective secondary market for spectrum usage rights could help alleviate spectrum shortages by making unused or underutilized spectrum held by existing licensees more readily available to other users and uses and help to promote the development of new, spectrum efficient technologies.”¹⁰⁰ In pursuing its secondary markets initiative, the FCC has committed to implementing the core principle that “[l]icenses and spectrum usage rights should be easily transferable for lease or sale, divisible or aggregatable.”¹⁰¹ Accordingly, the FCC has announced its intent “to remove, relax or modify our rules and procedures to eliminate unnecessary inhibitions on the operation of secondary market processes and to promote flexibility and fungibility (exchangeable or substitutable) in the use of spectrum.”¹⁰²

⁹⁷ See *Principles for Promoting the Efficient Use of Spectrum by Encouraging the Development of Secondary Markets*, Policy Statement, 15 FCC Rcd 24178 (2000) (“*Spectrum Secondary Markets Policy Statement*”).

⁹⁸ *Spectrum Secondary Markets Policy Statement* at 24181 ¶ 10 (2000); see also *Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets*, Notice of Proposed Rulemaking, 15 FCC Rcd 24203 (2000) (“*Spectrum Secondary Markets NPRM*”) (initiating proceeding to examine proposals to facilitate leasing of spectrum rights).

⁹⁹ *Spectrum Secondary Markets Policy Statement* at 24184 ¶ 16, 24185-86 ¶ 18.

¹⁰⁰ *Id.* at 24178-79 ¶ 2.

¹⁰¹ *Id.* at 24186 ¶ 20 (emphasis added).

¹⁰² *Id.* at 24186 ¶ 19.

In fact, the FCC's rules governing other wireless services already offer licensees significant flexibility in transferring their spectrum rights. For example, the FCC long ago abolished its anti-trafficking rule that presumed that the sale of a broadcasting station within three years of the acquisition of the license or permit constitutes prohibited trafficking.¹⁰³ More recently, the FCC eliminated its long-standing rule prohibiting for-profit sales of unbuilt commercial broadcast stations.¹⁰⁴ In addition, the FCC generally does not review assignments or transfers of terrestrial-based, nonbroadcast, fixed and mobile wireless licenses to determine whether trafficking has occurred.¹⁰⁵ Furthermore, cellular, broadband PCS, and other terrestrial wireless licensees are permitted, upon regulatory approval, to freely disaggregate and partition their licenses.¹⁰⁶

A. The FCC Should Interpret Its Anti-Trafficking Rule To Permit The Free Transfer Of 2 GHz MSS Authorizations

Consistent with the FCC's policy of fostering robust secondary markets in spectrum usage rights, New ICO urges the Commission to interpret its anti-trafficking rule generally to

¹⁰³ See *Amendment of Section 73.3597 of the Commission's Rules (Applications for Voluntary Assignments or Transfers of Control)*, 52 RR 2d 1081 ¶ 21 (1982), *reconsidered in part*, 99 FCC 2d 971 (1985) ("73.3597 Rules"). In 1989, the FCC declined to initiate a rulemaking proceeding to reinstate the broadcast anti-trafficking rule. See *Amendment of Section 73.3597 of the Commission's Rules (Applications for Voluntary Assignments or Transfers of Control)*, 4 FCC Rcd 1710 (1989), *aff'd*, *Office of Communication of the United Church of Christ v. FCC*, 911 F.2d 813 (D.C. Cir. 1990).

¹⁰⁴ See *1998 Biennial Regulatory Review—Streamlining of Mass Media Applications, Rule, and Processes*, Report and Order, 13 FCC Rcd 23056, 23070 ¶ 30 (1998) ("1998 Mass Media Biennial Review").

¹⁰⁵ See 47 C.F.R. § 1.948(i); *Forbearance from Applying Provisions of the Communications Act to Wireless Telecommunications Carriers*, First Report and Order, 15 FCC Rcd 17414, 17429 ¶ 33 (2000) ("Wireless Forbearance Order"). Section 1.948(i) of the FCC's rules applies to all "Wireless Radio Services," which are defined as all radio services authorized under Parts 13, 20, 22, 24, 26, 27, 74, 80, 87, 90, 95, 97, and 101 of the FCC's rules. These services include Personal Communications Service, Cellular Radiotelephone Service, Public Mobile Services other than Cellular, Specialized Mobile Radio Service, Wireless Communications Service, Local Multipoint Distribution Service, Fixed Microwave Service, 700 MHz Service, 700 MHz Guard Band Service, 39 GHz Service, 24 GHz Service, 3650-3700 MHz Service, 218-219 MHz Service, and Private Land Mobile Radio Services. See *Spectrum Secondary Markets NPRM* at 24208 ¶ 13 n.19.

¹⁰⁶ See *Geographic Partitioning and Spectrum Disaggregation by Commercial Mobile Radio Services Licensees*, Second Report and Order, 15 FCC Rcd 10432, 10433 ¶ 2, 10434-35 ¶ 4 (2000).

permit 2 GHz MSS licensees to assign or transfer control of any built or unbuilt system licenses. As applied to 2 GHz MSS licenses, the FCC’s anti-trafficking rule, which is set forth in Section 25.143(g) of its rules, requires the Commission to review assignments or transfers of 2 GHz MSS licenses to determine whether trafficking has occurred.¹⁰⁷ The FCC defines “trafficking” as “obtaining or attempting to obtain an authorization for the principal purpose of speculation or profitable resale of the authorization rather than for the provision of telecommunication services to the public or for the licensee’s own private use.”¹⁰⁸ The anti-trafficking rule further provides that the FCC may require parties to submit “an affirmative, factual showing . . . to demonstrate that no trafficking has occurred.”¹⁰⁹ In particular, the FCC may require parties to (1) disclose the complete details of the sale of facilities or merger of interests; (2) itemize the amounts of consideration for the sale of facilities or merger of interests; and (3) demonstrate that the consideration paid for the facilities or business interests involved represents their fair market value at the time of the transaction.¹¹⁰

Although the anti-trafficking rule is not intended to discourage legitimate investments in 2 GHz MSS systems,¹¹¹ it still may produce this effect if narrowly interpreted and strictly applied. Accordingly, the FCC as an initial matter should clarify that the anti-trafficking rule does not bar 2 GHz MSS licensees from freely assigning or transferring control of any built or unbuilt system licenses in connection with a corporate merger or acquisition. In fact, Section 25.143(g)(3) of the FCC’s rules indicates that licenses may be transferred if it is “incidental to a

¹⁰⁷ 47 C.F.R. § 25.143(g)(2).

¹⁰⁸ *Id.* § 1.948(i)(1).

¹⁰⁹ *Id.* § 25.143(g)(2).

¹¹⁰ *Id.* § 25.143(g)(3).

sale of other facilities or merger of interests.” Moreover, the FCC consistently has stressed that its anti-trafficking rule is not intended to prevent capital investments by either debt or equity financing.¹¹² Instead, the rule is intended solely to discourage and prevent the unjust enrichment of those acquiring licenses for speculative purposes and with no intent to implement their authorized systems.¹¹³

Corporate mergers and acquisitions will provide MSS operators with necessary capital and create operating efficiencies enabling them to deploy their systems in a timely manner and compete effectively in the dynamic MSS market. Moreover, strict enforcement of the milestone requirements will effectively discourage speculation and guarantee that mergers and acquisitions will not delay the timely deployment of MSS systems. Thus, the FCC should adopt a presumption that parties acquiring or transferring built or unbuilt 2 GHz MSS system licenses have no speculative intent and that Commission review of every license assignment to determine whether trafficking has occurred is unnecessary. This approach is consistent with that taken with respect to assignments or transfers of terrestrial-based, nonbroadcast, fixed and mobile wireless license, where the FCC has clarified that review of these transactions to determine whether trafficking has occurred is merely “discretionary.”¹¹⁴

¹¹¹ See *2 GHz MSS Rules Order* at 16186 ¶ 130 (“we do not intend our anti-trafficking rule to be an impediment to legitimate investments in 2 GHz MSS systems.”).

¹¹² See *Id.* at 16186 ¶ 128 (“it is not our intent to adopt an anti-trafficking rule that would prevent debt or equity transactions”); *Amendment of the Commission’s Rules to Establish Rules and Policies Pertaining to a Mobile Satellite Service in the 1610-1626.5/2483.5-2500 MHz Frequency Bands*, Report and Order, 9 FCC Rcd 5936, 6014 ¶ 203 (1994) (anti-trafficking rule “is not intended to prevent the infusion of capital by either debt or equity financing”).

¹¹³ See *2 GHz MSS Rules Order* at 16186 ¶ 128; *Year 2000 Biennial Regulatory Review – Amendment of Part 22 of the Commission’s Rules to Modify or Eliminate Outdated Rules Affecting the Cellular Radiotelephone Service and Other Commercial Mobile Radio Services*, Notice of Proposed Rulemaking, 16 FCC Rcd 11169 ¶ 64 (2001).

¹¹⁴ *Wireless Forbearance Order* at 17429 ¶ 33 (citation omitted). The FCC further stated that it “would rarely need to exercise this discretionary authority to review assignments or transfers of authorizations that were assigned
Footnote continues...

The FCC also should not narrowly interpret its anti-trafficking rule to prohibit an assignment or transfer of a 2 GHz MSS license merely because of the for-profit nature of the transaction or because construction has not been completed. In fact, when the FCC eliminated its anti-trafficking rule governing broadcast services in 1982, it concluded that the “purchase and rapid resale of broadcast properties” may serve the public interest by allowing the so-called “speculator” to inject new capital and ideas into a failing operation. At a minimum, the resale would permit the purchaser to provide “caretaker service” until a more committed party is willing and able to assume control.¹¹⁵

The FCC also has permitted the transfer of control of a cellular construction permit, despite the for-profit nature of the transaction and the unbuilt status of the authorized system.¹¹⁶ Specifically, in *Bill Welch*, the FCC concluded that the Communications Act does not prohibit for-profit sales of authorizations for unbuilt wireless facilities.¹¹⁷ The FCC further found that a licensee will have no incentive to transfer its license if it cannot gain any profit and thus will likely construct minimally acceptable facilities before transferring its license. This, the FCC explained, would produce an economically inefficient result because the “costs, perhaps significant, that would be incurred by the larger carrier to integrate two stand-alone systems built for different purposes...would be avoided by simply permitting the sale of a construction authorization at a profit prior to construction.”¹¹⁸

through auction because the auction process, by requiring initial licensees to pay market value for their authorizations, effectively safeguards against such speculation.” *Id.* (emphasis added) (citation omitted).

¹¹⁵ See 73.3597 Rules ¶ 21.

¹¹⁶ See *Application of Bill Welch*, Memorandum Opinion and Order on Review, 3 FCC Rcd 6502 (1988).

¹¹⁷ *Id.* at 6504 ¶ 16.

¹¹⁸ *Id.* at 6504 ¶ 19 (citation omitted). While acknowledging that permitting for-profit sales of unbuilt system licenses creates the possibility of speculation, the FCC stated that it does “not believe that restricting for-profit
Footnote continues...

Subsequently, the FCC reaffirmed the reasoning of *Bill Welch* and eliminated its long-standing rule barring for-profit sales of unbuilt commercial broadcast stations. The FCC found that the risk of spectrum speculation is minimal where the construction permits were awarded by auction, since the auction process “provides a strong impetus for timely station construction.”¹¹⁹ The FCC further found that this risk is minimal even where the construction permits were not awarded by auction.¹²⁰

Similarly, the FCC should find that the risk of speculation for 2 GHz MSS licenses is insignificant. As noted above, strict enforcement of the milestone requirements will effectively discourage speculation. Moreover, the substantial efforts that 2 GHz MSS licensees have made in preparing extensive proposals and obtaining international coordination of their systems further minimize the risk of speculation. Additionally, as the FCC correctly reasoned in *Bill Welch*, it would be economically inefficient to require licensees to complete construction of their systems before assigning or transferring their licenses. Thus, the FCC should freely permit assignments and transfers of 2 GHz MSS licenses, regardless of the construction status of the authorized system or the amount paid for the assignment or transfer.

B. The FCC Should Permit 2 GHz MSS Licensees To Lease Spectrum From And Share Satellite Infrastructure With Other Licensees

New ICO also urges the Commission to afford 2 GHz MSS licensees greater flexibility in leasing spectrum from and sharing satellite infrastructure with other licensees. By doing so, the Commission will extend the same regulatory treatment to 2 GHz MSS licensees that it already

transfers of authorizations for unbuilt facilities is the most efficient or effective way to discourage such speculation.” *Id.* at 6504 ¶ 20.

¹¹⁹ See 1998 *Mass Media Biennial Review* at 23071 ¶ 31.

¹²⁰ The FCC reasoned that the permittees originally filed their applications under rules that prohibited for-profit sales of the permits and thus were not likely to have submitted a speculative filing. *Id.* at 23071 ¶ 32.

has given or proposed to give to other satellite and terrestrial wireless licensees. For example, since 1981, the FCC has allowed geostationary fixed satellite service (“FSS”) licensees to lease or sell any or all of their transponder capacity to other parties.¹²¹ Similarly, the FCC permits licensees of non-common carrier satellite systems, including Big LEOs and Little LEOs, to offer capacity to customers under individualized arrangements ranging from short-term leases to sales.¹²² Provided that these licensees remain responsible for compliance with the FCC’s rules, they “may lease or sell one or all transponders on a satellite to any party they wish, and the leases may be of any time duration.”¹²³ They also are not required to obtain approval from or otherwise notify the FCC of these transactions.¹²⁴ In addition, the FCC has proposed to allow terrestrial-based, nonbroadcast, fixed and mobile wireless licensees “to subdivide and apportion the spectrum and to lease their rights to use it to various third party users—in any geographic or service area, in any quantity of frequency, and for any period of time during the term of their licenses—without having to secure prior Commission approval.”¹²⁵

Notably, the FCC has waived its due diligence requirements to permit DBS licensees to lease or purchase satellite capacity from other licensees, rather than requiring them to construct and launch their own satellites. For example, the FCC waived its due diligence requirements to permit Dominion Video Satellite, Inc. (“DVSI”) to provide DBS service by leasing eight

¹²¹ See *Domestic Fixed-Satellite Transponder Sales*, 90 FCC 2d 1238, 1252 ¶ 34 (1982); *Amendment to the Commission’s Regulatory Policies Governing Domestic Fixed Satellite and Separate International Satellite Systems*, Report and Order, 11 FCC Rcd 2429 (1996).

¹²² See *Spectrum Secondary Markets NPRM* at 24226 ¶ 66.

¹²³ *Id.*

¹²⁴ *Id.*

¹²⁵ *Id.* at 24211 ¶ 20.

transponders on Echostar's satellite.¹²⁶ In noting the efficiencies and public interest benefits of allowing the sharing of satellite infrastructure, the FCC stated:

“By allowing DVSI to use extra transponders on EchoStar III, rather than requiring DVSI to construct and launch another DBS satellite, the spectrum/orbit resource will be put to use more quickly and efficiently than if we were to revoke DVSI's authorization and re-license the channels, either by auction or another licensing mechanism. Taking advantage of the transponder capacity that is already in orbit will avoid the enormous expense and delay involved in constructing and launching a separate satellite....Waiving the satellite construction requirement of the due diligence rules will not undermine, but rather, advance the policy objective of getting service to the public because it will permit DVSI to offer DBS service immediately.”¹²⁷

The FCC also should clarify or waive its milestone requirements to the extent necessary, so as to permit the assignment or transfer of a 2 GHz MSS license to an existing 2 GHz MSS licensee without requiring deployment of multiple systems.¹²⁸ Although a literal interpretation of the milestone requirements could require construction of multiple 2 GHz MSS systems even if the licenses are commonly held, the FCC has not adopted this approach for other satellite services. For example, when the FCC approved the transfer of control of the DBS authorizations of United States Satellite Broadcasting Co. (“USSB”) to DIRECTV Enterprises, Inc. (“DIRECTV”), it waived its due diligence requirements and thus declined to require USSB to launch a satellite under its construction permit.¹²⁹ Instead, the FCC allowed DIRECTV to use its existing satellite to provide DBS service on the channels authorized under USSB's construction

¹²⁶ See *Dominion Video Satellite, Inc.*, 14 FCC Rcd 8182 (Int'l Bur. 1999); see also *United States Satellite Broadcasting Co.*, 7 FCC Rcd 7247 (Mass Media Bur. 1992) (authorizing joint use of a satellite by United States Satellite Broadcasting and the predecessor-in-interest of DirecTV, rather than requiring deployment of multiple satellites).

¹²⁷ *Dominion Video Satellite, Inc.* at 8186-87 ¶¶ 11-12.

¹²⁸ If the licensee acquires multiple licenses for geostationary, non-geostationary, and hybrid MSS systems, it should be permitted to elect which type of system it will deploy, subject to the milestone requirements applicable to that particular system.

permit. Accordingly, the FCC should extend similar treatment to 2 GHz MSS operators that may hold multiple licenses.

CONCLUSION

New ICO urges the Commission to promote the prompt deployment of next-generation 2 GHz MSS systems by maintaining the existing 2 GHz MSS allocation and permitting flexibility in the sharing of satellite infrastructure and transfer of licenses. If reallocation of limited spectrum is deemed necessary, the Commission must not adopt any reallocation that would conflict with the global MSS allocation, and any reallocated spectrum should be made available only to displaced incumbent federal government users.

Respectfully submitted,

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¹²⁹ See *United States Satellite Broadcasting Co.*, Order and Authorization, DA 99-633 ¶ 20 (Int'l Bur. rel. Apr. 1, 1999).

CERTIFICATE OF SERVICE

I, Gwendolynne M. Chen, do hereby certify that I have on this 22nd day of October, 2001, had copies of the foregoing **COMMENTS OF NEW ICO GLOBAL COMMUNICATIONS** electronically delivered to the following:

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